Why the Afterbody Went Flying

By AD2(AW) Randy Penrod

The P-3C is a multi-crew aircraft, and its aviators rely on crew resource management (CRM) every day for mission accomplishment. At the core of CRM are the tenets of decision-making, assertiveness, mission analysis, communication, leadership, adaptability and flexibility, and situational awareness. These same tenets work in maintenance. As a maintainer, I learned the importance and value of a few of the skills, specifically situational awareness and communication, one duty weekend in Brunswick, Maine.

An unsecured afterbody can become a missile.

That particular weekend was busier than normal as we focused on getting an aircraft full mission capable (FMC) for the coming week's flight schedule. Two props on the aircraft needed balancing, which entailed turning the aircraft, running the balance gear, adding or subtracting weights to the props, and turning the aircraft again to check the balance.

On the turn, I was the collateral-duty inspector (CDI) with an experienced third class petty officer and a new third class to assist me. The turn occurred without incident, and, afterwards, as I have done countless times before, I went into the shop to update maintenance control and the maintenance action forms (MAFs) while the other two maintainers removed the balance gear and installed the propeller afterbody assemblies.

Finished with the MAFs, I headed back out to the aircraft and intercepted one of my team members. That maintainer told me the ground-turn crew planned to start engines again to check reverse shaft horsepower (SHP) on the No. 3 engine—one of the engines we just had balanced.

Within seconds of returning to my shop, the maintenance chief called, saying the afterbody fell off the aircraft. My heart sank, and I could not believe it! I immediately proceeded out to the aircraft and saw that my team had failed to install the bolts, allowing the afterbody to fall free during the turn.

The flight engineer (FE) was new to the command and had failed to recognize I was the CDI and started the engines again without confirming the afterbodies were installed or completing another walk-around inspection.

I'm thankful that the flying afterbody didn't hit anyone or anything on the way down. Everyone involved in this fiasco relearned two basic CRM or MRM (maintenance resource management) skills: communication and situational awareness.

As the CDI, I should have let the FE know that I was heading into the hangar to sign off MAFs and my workers were installing the afterbodies. My workers should have told the FE that the installation had not been CDI'd and should have had the situational awareness to stop the turns, knowing I had not signed off on their work.

The FE, noticing the petty officers no longer were working on the afterbody, assumed the work was done. Instead of talking to someone or checking the work, he proceeded to turn the engine.

The requirement to have ready-for-tasking (RFT) aircraft, increased operational tempo, and perceived pressure are common to all fleet squadrons, and these conditions have the potential to cause a mishap. It happened to us, but we have the ability to learn from our mistakes, as do other Sailors and shipmates.

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